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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/757,651	KRAISS, ACHIM
Office Action Summary	Examiner	Art Unit	
	DAVID SILVER	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 May 2008</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,3,5-7,11,12,14 and 20-31</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,3,5-7,11,12,14 and 20-31</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3, 5-7, 11, 12, 14, 20-31 are currently pending in Instant Application.

2. The Instant Application is not currently in condition for allowance.

Priority

3. Claimed priority has been acknowledged in previous Office Action **(1/14/04)**.

Response to Arguments

Response: Claim Objections

4. **Applicants argue:**

4.1 "The Examiner objected to FIG. 3 as showing only that which is old and requested that FIG. 3 be

designated "Prior Art." Without conceding the correctness of the objection, FIG. 3 has been amended

to include the label "Prior Art." It should be noted that various aspects of the claimed subject matter

may be implemented using the framework illustrated in FIG. 3, and in that sense, FIG. 3 also

describes subject matter that is not prior art. As such, the Applicant respectfully requests that the

Examiner withdraw the objection." **(Remarks: 11)**

5. **Examiner Response:**

5.1 Applicants are thanked for amending the drawings in order to overcome the objections. The

amendments are sufficient; accordingly, the objections have been withdrawn.

Response: Claim Rejections 35 U.S.C. § 101

6. **Applicants argue:**

6.1 "Claims 1, 3, 5-7, 11, 12, 14, and 20-31 stand rejected under 35 U.S.C. § 101 as being directed to

non-statutory subject matter. The Examiner contends that the claims are directed to non-statutory

subject matter because the claims recite software steps that do not produce a useful, tangible, and

concrete result. Contrary to the Examiner's assertion, the amended claims recite computing and

electronically storing prediction results formatted in a new and useful way, in addition to

electronically communicating the prediction results to an application system. As described in the

Specification, the prediction results facilitate interactions between call-center agents and customers.

(Spec. at [0013].) Thus, the claims produce a useful, tangible, and concrete result. As such, the claims are directed to statutory subject matter and Applicant respectfully requests that the Examiner withdraw the rejection." **(Remarks: page 11-12)**

7. **Examiner Response:**

7.1 Applicants' arguments and amendments have been fully considered but are unpersuasive. Specifically, sending an electronic signal 1) is not drawn to a practical real world application as the result is not realized outside the application system (one or more software applications); 2) is not a tangible final result. The "storing" of data likewise does not render the claims statutory. The claims remain drawn to nonstatutory subject matter; accordingly, the rejection is maintained.

7.2 Claim 14, for example, is interpreted as a product claim and is drawn to statutory subject matter. The claim and its dependents are statutory due to the physical computer-readable medium aspects. See MPEP 2106.01, which recites, in part: "When a computer program is claimed in a process where the computer is executing the computer program's instructions, USPTO personnel should treat the claim as a process claim. " When a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim." Therefore, the rejection of claim 14 and its dependents has been withdrawn.

7.3 Claim 21 is not drawn to a product because 1) the physical computer memory (computer-readable medium) is recited in the preamble and is therefore not given patentable weight. This is because the preamble is not as it is not necessary for the life, meaning, and vitality of the claim body. Therefore, the claim (and its dependents) are drawn to a process claim, which is nonstatutory for the reasons set-forth above.

7.4 Regarding claims 22 and 27, it is unclear whether the method is 1) stored as a computer program on a physical structure, or 2) being executed by a computer. Accordingly, claim's statutory class is unknown. Considering the claim's body limitations, the claim appears to be drawn to a process and examined as such. Accordingly, the claim is drawn to nonstatutory subject matter for the reasons set-forth above.

7.5 The 35 U.S.C. § 101 rejection of all claimed (except claim 14 and its dependents) are <u>maintained</u>.

Response: 35 U.S.C. § 112

8. **<u>Applicants argue:</u>**

8.1 "Claims 1, 3, 5-7, 11, 12, 14, and 20-31 stand rejected under 35 U.S.C. 112, second paragraph as

being indefinite for failing to point out and distinctly claim the subject matter which Applicant regards

as the invention. The Examiner argues that the term "application system" is insufficiently defined. As

amended, the claims recite "an application system comprising one or more software applications that

run in a computing environment." The Applicant submits that, as amended, "application system" is

adequately defined. As such, Applicant respectfully requests the Examiner withdraw the rejection."

(Remarks: page 12)

9. **<u>Examiner Response:</u>**

9.1 Applicants are thanked for amending the claims in order to overcome the deficiency. Applicants'

amendments are sufficient. Specifically, the one or more software applications are defined in PGPUB

para 12, "these applications are software applications running in a customer relationship

management (CRM) environment". Accordingly, the rejection is <u>withdrawn</u>.

Response: 35 U.S.C. § 102

10. **<u>Applicants argue:</u>**

10.1   "Applicant's amended claims are patentable over the cited references because the references,

either alone or in combination, do not disclose or suggest all elements of Applicant's claims. The cited

references fail to teach or render obvious using prior prediction results to generate new, more

accurate prediction results during an interactive session with a user. Specifically, neither Tamayo nor

Eskandari, alone or in combination, disclose or suggest "using stored state information to select a

second decision tree node" or "using the second decision tree node, the stored state information, and

the second input value set to compute a second prediction result," as recited in the independent

claims." **(Remarks: bottom of page 12)**

11. **<u>Examiner Response:</u>**

11.1   Applicants are thanked for their remarks and amendments. Full consideration has been given to

the amendments. Applicants' arguments are persuasive accordingly the rejections have been

<u>withdrawn</u>. However, after further consideration a new ground of rejection is applied below <u>as being</u>

<u>necessitated by amendment</u>.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new
and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 1, 3, 5-7, 11, 12, and 21-31 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

MPEP 2106 recites, in part:
"...USPTO personnel shall review the claim to determine it produces a useful, tangible, and concrete result. In making this
determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and
concrete, but rather on whether the *final* result achieved by the claimed invention is "useful, tangible, and concrete."
(emphasis added)

12.1   The method claims do not produce a useful, tangible, and concrete final result. The steps of the

method claims do not produce a useful, tangible, and concrete result. They merely recite a software

algorithm, per se, which, for example, does not display, store, or otherwise provide a useful tangible

output. Note exemplary claim 1 which only recites software steps and does not produce a useful

tangible and concrete *final* result. See MPEP 2106 [R-5] (partially recited above).

12.2   For example, claim 21 is not drawn to a product because 1) the physical computer memory

(computer-readable medium) is recited in the preamble and is therefore not given patentable weight.

This is because the preamble is not as it is not necessary for the life, meaning, and vitality of the

claim body. Therefore, the claim (and its dependents) are drawn to a process claim, which is

nonstatutory for the reasons set-forth above.

12.3   Regarding claims 22 and 27, it is unclear whether the method is 1) stored as a computer

program on a physical structure, or 2) being executed by a computer. Accordingly, claim's statutory

class is unknown. Considering the claim's body limitations, the claim appears to be drawn to a

process and examined as such. Accordingly, the claim is drawn to nonstatutory subject matter for

the reasons set-forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 3, 5-7, 11, 12, 14, and 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Tamayo **(US 20020083067)** and further in view of Belniak **(US 7379926)**..

Tamayo discloses: 1. (Currently Amended) A computer-implemented method for providing prediction

results to an application system comprising one or more software applications that run in a computing

environment during an interactive session with a user, the method comprising:

receiving a first electronic communication that includes a first input value set from the application

system comprising one or more software applications that run in the computing environment; selecting a

first decision tree node by traversing one or more nodes of a decision tree using the first input value set;

using the first decision tree node and the first input value set to compute a first prediction result; sending

a second electronic communication that includes the first prediction result back to the application system;

electronically storing state information generated from the computation of the first prediction result **(Fig**

17, 18 and descriptions, para 13, 7, 42; traversal of decision tree nodes is inherent in

decision trees and in the way they function);

receiving a third electronic communication that includes a second input value set from the

application system **(para 42; Fig 17, 18 and descriptions; para 235: "two-stage process")**;

sending a fourth electronic communication that includes the second prediction result to the

application system **(Fig 10, note loop feeding back from 1042 to 1008; para 116, 117, 127)**.

Tamayo does not disclose, although substantially hints at **(para 82; caching of results)** using the stored state information to select a second decision tree node by traversing the decision tree beginning at a decision tree node referenced by the stored state information; using the second decision tree node, the stored state information and the second input value set to compute a second prediction result **(col: 9 line: 42-51)**.

It would have been obvious to store and reuse the state information rather than recalculating the information from scratch due to the benefits of time and the costs associated therewith.

In view of the KSR v. Teleflex Supreme Court ruling, it is asserted that one of ordinary skill in the art would have recognized that applying the known technique would have yielded predictable results. Furthermore, one of ordinary skill in the art would have recognized that the results of the combination were predictable. Specifically, the use of caches (storing information for later retrieval) is well known in the art and one of ordinary skill in the art would have recognized that applying a caching technique to a decision tree would yield faster processing because traversals of upper nodes would not have to be recomputed.

See MPEP 2145 [R-6], X, B, " [A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007).

Tamayo discloses: 3. (Currently Amended) The computer-implemented method of claim 1, wherein

the second input value set includes both the first input value set and an additional set of input values, and wherein the method comprises using the decision tree along with the stored state information and the additional set of input values to compute the second prediction result.

Tamayo discloses: 5. (Previously Amended) The computer-implemented method of claim 1, wherein the first input value set includes at least two input values **(para 225: "inputs", noting that second input value set may be void)**.

Tamayo discloses: 6. (Previously Amended) The computer-implemented method of claim 1, wherein the second input value set includes at least two input values **(para 225: "inputs", noting that second input value set may be void)**.

Tamayo discloses: 7. (Currently Amended) The computer-implemented method of claim 1, wherein the method comprises:

      receiving the first electronic communication that includes the first input value set from the application system during an interactive session with a customer **(para 235)**; and

      receiving the second electronic communication that includes the second input value set from the application system during the interactive session with the customer **(para 235)**.

Tamayo discloses: 11. (Currently Amended) The computer-implemented method of claim 1, wherein the stored state information includes intermediate probability information **(para 235)**.

Tamayo discloses: 12. (Original) The computer-implemented method of claim 1, wherein the first and second prediction results each specify a probability of customer chum **(para 241)**.

As per claims 14, 20, 21, note the rejection of claims 1, 11, 1 (respectively) above. The Instant Claims recite substantially same limitations as the above-rejected claims and are therefore rejected under same prior-art teachings.

As per claims 22-24, note the rejection of claim 7 above. The Instant Claims recite substantially same limitations as the above-rejected claim and are therefore rejected under same prior-art teachings.

As per claims 25-26, note the rejection of claims 11-12 above. The Instant Claims recite substantially same limitations as the above-rejected claims and are therefore rejected under same prior-art teachings.

As per claims 27-31, note the rejection of claims 1, 1, 24, 11, 26 (respectively) above. The Instant Claims recite substantially same limitations as the above-rejected claims and are therefore rejected under same prior-art teachings.

Support for Amendments and Newly Added Claims

Applicants are respectfully requested, in the event of an amendment to claims or submission of new claims, that such claims and their limitations be directly mapped to the specification, which provides

support for the subject matter. This will assist in expediting compact prosecution. MPEP 714.02 recites:

"Applicant should also specifically point out the support for any amendments made to the disclosure. See

MPEP § 2163.06. An amendment which does not comply with the provisions of 37 CFR 1.121(b), (c), (d),

and (h) may be held not fully responsive. See MPEP § 714." **Amendments not pointing to specific**

support in the disclosure may be deemed as not complying with provisions of 37 C.F.R.

1.131(b), (c), (d), and (h) and therefore held not fully responsive. Generic statements such as

"Applicants believe no new matter has been introduced" may be deemed insufficient.

Conclusion

14. All claims are rejected.

15. The Instant Application is not currently in condition for allowance.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office

action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of

the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from

the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date

of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX

MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to David Silver whose telephone number is (571) 272-8634. The examiner can normally be

reached on Monday thru Friday, 10am to 6:30pm. If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll-free).

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128

/ DS /
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